

Notice of Reasons for Rejection

Application No.:	2006-522742
Date of drafting:	April 6, 2009
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Applicable article(s) of patent law:	Articles 29(1), 29(2)

This application shall be rejected for the following reasons. If you have any argument, you may submit it within 3 months from the date of dispatching.

Reasons

A. A patent shall not be granted to this application under the article 29(1)(iii) of the patent law, because the inventions claimed in the following claims were described in the following publications distributed in Japan or elsewhere or made available to the public through electric telecommunication lines prior to the filing of the patent application.

B. A patent shall not be granted to this application under the article 29(2) of the patent law, because the inventions claimed in the following claims could have been easily invented by a person with ordinary skill in the art to which the inventions pertain, based on the inventions which were described in the following publications distributed in Japan or elsewhere or made available to the public through electric telecommunication lines prior to the filing of the patent application.

Description (Regarding the cited documents, see the list)

1. As to Reason A
- for claims 1-2, 14, 17: cited document 1

Remarks:

The cited document 1, (especially p.8, right column, lines23-25, and p.10, section "5. QoS control signaling ", Fig.6) discloses QoS assurance method in mobile network in which MT (equivalent to "mobile station!" of the present invention) sends RESV message of RSVP at call setup (equivalent to "establishing a flow" of the present invention), or requests resource according to sending a request for resource reservation

independently (equivalent to "a first request message" of the present invention). When AR/BTS (equivalent to "wireless network node" and "radio node" of the present invention) receives it (equivalent to "receiving" of the present invention), before transferring RSVP message to an upstream router, AR/BTS queries to an RRM server about admission control, and the RRM server checks whether or not to admit and then notify the result of AR/BTS. Based on the result, AR/BTS transfers RESV message (equivalent to "a second request message" of the present invention) to the upstream router. AR/BTS reserves radio resources in accordance with a grant by the RRM server (equivalent to "granting" of the present invention) and notifies of MT (equivalent to "a reply message" of the present invention) a radio link specific information such as a channel identifier (equivalent to "airlink parameters" of the present invention). According to those steps, MT becomes able to initiate QoS assured communications; and as well as centralized management that a server manages usage information of resource of AR/BTS, distributed management that AR/BTS exchange usage information of resource with each other is conceivable. Above disclosure is considered to disclose that whether or not to admit is checked at AR/BTS in case of exchanging usage information of resource at AR/BTS, the request for resource reservation receives from MT because the request reserves resource (equivalent to "quality of service parameter" of the present invention), and messages transferred from AR/BTS includes quality of service parameters (equivalent to "comprising at least one quality of service parameter", "comprising... granted quality of service parameters" of the present invention).

Therefore, elements necessary to specify the invention of the present claims 1-2, 14, 17 and those of the invention disclosed in D1 are identical and no difference can be found, a patent shall not be granted to this application under the article 29(1)(iii) of the patent law.

2. As to Reason B

2-1. for claims 1-2, 14, 17: cited document 1

Remarks:

For the same reason described in "1. As to Reason A", the invention of the present claims 1-2, 14, 17 could have been easily invented based on the invention of D1 by a person skilled in the art.

2-2. for claims 3-4, 19-21: cited documents 1-2

Remarks:

The present claim 3 and D1 are different in that claim 3 recites a reply message

includes quality of service parameters but D1 does not especially disclose it. However, it is disclosed in the cited document 2 (D2) when reserving a communication line by specifying transmission conditions such as band etc., if reservation can not be ensured, providing an alternative which is similar to the request and available for reservation prevents from repeating retrials for reservation (in EP counterpart application of D2, paragraphs [0003]-[0011], [0072]-[0094]).

Therefore, by referring to D2, a person skilled in the art could have been easily arrived at the present invention of claims 3-4, 19-21 by modifying D1 to include an alternative in the notification to MT disclosed in D1.

2-3. for claims 6, 15-16, 23-24: cited documents 1, 3

The cited document 3 (D3; especially US counterpart application of D3, paragraph [0005]) discloses that a RESV message contains a QoS request and Tspecs.

The present claim 6 and D1 are different in that while the present claim 6 recites sending a filtering message, D1 does not especially disclose it.

However, as D3 discloses, it is generally known to a person skilled in the art that a request for ensuring resource of RSVP contains FlowSpec including Rspec and Tspec, and filter specifications. With referring to the technical knowledge, it is considered that a person skilled in the art could have easily arrived at the invention of the present claim 6 by modifying D1 to comprise sending a filtering message.

Similarly, it is considered that a person skilled in the art could have easily arrived at the invention of the present claims 6, 15-16, and 23-24 to include Tspec and a QoS request in a RESV message transferred from AR/BTS by applying D3 to D1.

2-4. for claims 5, 22: cited documents 1, 4

Remarks:

The cited document 4 (D4, especially page 1, line 22 to page 2, line 19) discloses that a profile server is used as an AAA server, and QoS is stored at a profile server.

Therefore, it is considered that a person skilled in the art could have easily arrived at the invention of the present claims 5 and 22 by applying D4 to D1 and make.

2-5. for claims 7, 10: cited documents 1, 5

Remarks:

The cited document 5 (D5, especially p.2, column left, line 19 to p.5, column right, line 6, p.7 "5. Conclusion", Fig.5) discloses that multiple PDP contexts are

integrated into a single wireless access bearer and upon the single wireless access bearer, QoS requests different from communication to communication are supported, and since transferring is performed by an user IP packet on an Iu bearer among RNC and SGSN, QoS control by Diffserv is performed by according to mapping DSCP (equivalent to "a policy" of the present invention) to a tunneling IP packet. Thus, it discloses a QoS control by mapping DSCP in each communication flow integrated on a single Iu bearer.

And, the present claim 7 and D1 are different in that claim 7 recites one packet filter comprises a plurality of packet filter content option, and at least one packet filter is identified by a flow identifier, but D1 does not especially disclose it.

However, D5 is considered to control QoS in each communication flow. Then, it is considered that a person skilled in the art could have easily arrived at the invention of the present claims 7 and 10 by applying D5 to D1 to integrate a plurality of communication flow to a route which reserved by RSVP and control QoS in each communication flow.

2-6. for claims 8-9: cited documents 1, 6

Remarks:

The cited document 6 (D6, especially counterpart EP application of D6, paragraph [0015], Fig.3) discloses regarding requested QoS of traffic in the uplink direction, MT determines whether to modify an existing PDP context or to create new PDP context, and modify/create with PDP context control means.

And, the invention of the present claims 8-9 and D1 are different in that the former updates QoS of an existing flow but D1 does not especially disclose it.

However, it is considered that a person skilled in the art could have easily arrived at the invention of the present claims 8-9 by applying D6 to D1 to modify an existing PDP context.

2-7. for claims 11-13, 18: cited documents 1, 5-6

As it is known art to perform QoS control to an uplink as D1 and D6 disclose (especially, as above disclosures), the invention of claims 11-13, 18 could have been easily arrived at by a person skilled in the art based on D1, D5-D6.

If any new rejection reason is found, it will be notified.

List of cited document(s)

1. Yukinori SUDA, "A Proposal of All-IP Mobile Network Architecture(2)", Report of research of Information Processing Society, Japan, Information Processing Society of Japan, May 24, 2002, vol. 2002, p.7-p.12
2. Japanese Patent Application Publication No. 2001-237828
(EP counterpart: EP1126659(A2))
3. Japanese Patent Application Publication No. 2002-10364
(US counterpart: US6,654,610(B1))
4. WO03/049468
5. Hiroshi KAWAKAMI, "Network Mobility Support for UMTS Networks" (CS2003-30), IEICE technical report, Japan, The Institute of Electronics, Information and Communication Engineers, June 13, 2003, vol. 103, No. 126, p.1-7
6. Japanese Patent Application Publication No. 2002-9840
(EP counterpart: EP1154600(A1))

(Notice) In accordance with the regulation of laws or contracts, part of or all of presented non-patent document may not be sent.

Record of results of prior art search

Field searched: IPC H04L 12/26
 H04L 12/28
 H04L 12/56
 H04Q 7/38

Prior Art literature(s):

Japanese Patent Application Publication No. 2003-174671
Japanese Patent Application Publication No. 2003-530767
Japanese Patent Application Publication No. 2004-535747
Japanese Patent Application Publication No. 2002-198992
Japanese Patent Application Publication No. 2002-523938
Japanese Patent Application Publication No. 2002-009840
Japanese Patent Application Publication No. 2002-010364

*The record of results of the prior art search shall not constitute any reason for rejection.

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